

Lotfi BEN TAHAR – Curriculum Vitae

Professor Of Inorganic Chemistry

Updated: October, 25, 2025

❖ PERSONAL DETAILS:

Name: **Lotfi Mohamed BEN TAHAR**

Nationality: **Tunisian**

Date of birth: **17\10\1969**

Place of birth: **Tbag; Korba; Tunisia**

Marital status: **Married; three children**

Languages: **Arabic; French; English**



Current Address: Arar, 73312, Northern Border, Kingdom of Saudia Arabia



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Mendely: <https://www.mendeley.com/search/>



Google Scolar: <https://scholar.google.ca/citations?user=8S4fAncAAAAJ&hl=en>



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Academia: <https://tunis.academia.edu/LotfiBENTAHAR>

❖ ACADEMIC PROGRESSION:

H.U. (Chemistry), Faculty of Science of Bizerte, Carthage University, Tunisia, (**2011**).

Ph.D. (Chemistry), Faculty of Science of Bizerte, Carthage University, Tunisia, (**2001**).

M.Sc. (Chemistry), Faculty of Science of Bizerte, Carthage University, Tunisia, (**1997**).

B.Sc. (Physics and Chemsitry), Faculty of Science of Bizerte, Carthage, University, Tunisia, (**1995**).

Title of the H.U. Thesis:

Spinel-Type Ferrite Nanoparticles: Synthesis, Correlation Between Structure, Microstructure, and Magnetic Properties, and Colloids for Hyperthermia

Title of the Ph.D. Thesis:

Investigation of Mixed Divalent Cation Hydrogenphosphates: Synthesis, Characterization, and Structural and Electrical/Dielectric Studies

❖ TEACHING EXPERIENCE:

○ Mars 2023AD – Present:

Full-time Professor at the Department of Chemistry, College of Science, Northern Border University, Saudi Arabia.

○ Mars 2017AD – Present:

Professor at the Department of Chemistry, Faculty of Science of Tunis, El Manar University, Tunisia.

○ September 2015 – Mars 2023AD:

Associate Professor at the Department of Chemistry, College of Science, Northern Border University, Saudi Arabia.

○ Decemember 2011 – Mars 2017AD:

Associate Professor at the Department of Chemistry, Faculty of Science of Tunis, El Manar University, Tunisia.

○ September 1999 – Decemember 2011AD:

Full-time Assistant Pofessor at the Department of Chemistry, Faculty of Bizerte, Carthage University, Tunisia.

○ 1998 – 1999AD:

Full-time Secondary School Teacher. Physical Sciences. Secondary School of Sidi Bouzid. Tunisia.

○ 1996 – 1998AD:

Part Time Faculty Teacher of General & Inorganic Chemistry at the Department of Chemistry, Faculty of Bizerte, Carthage University, Tunisia.

Have a total teaching experience of 26 years at a university level (1999-2025), during that period, supervising postgraduate students and teaching undergraduate and postgraduate level laboratories and lecture courses comprising General Chemistry, Physical Chemistry, Inorganic Chemistry and Nanoscience including the following courses:

1. General Chemistry (1)

2. General Chemistry (2)

3. The Chemistry of volumetric and gravimetric analysis

4. General Chemistry Lab.

5. Inorganic Chemistry (1)

6. Inorganic Chemistry (2)

7. Coordination Chemistry

8. The Chemistry of transition elements

9. The Chemistry of rare earth elements

10. Solid state chemistry

11. Crystallography (1)

12. Crystallography (2)

13. Nanoscience

14. Special topics of inorganic Chemistry

15. Experimental inorganic Chemistry

16. Chemistry of solutions

17. Thermochemistry

18. Reseach project

19. Nanochemsitry

❖ RESEARCH INTERESTS:

✓ Qualification summary

- **2004—present:** *Nanoscience & nanotechnology*

- **Key words:**

Nanoparticles; Nanomaterials; Soft chemistry; Polyol method; coprecipitation method; Sol-gel method; Surface functionalization; Ligand exchange chemistry; Size control; Shape control; Magnetic oxides; Ferrites; Spinel; Zerovalent metals; Alloys; Semiconductors; Core@shell systems; Quantum dots; Colloids; Characterizations; Magnetism; Superparamagnetism; Electrical properties; Fluorescence; Magnetocalorimetric properties; Adsorption; Heavy metals; Dyes; Hazardous chemicals; Removal; Catalytic activity; Wastewaters; Water treatment; Pollution; Decontamination; Environment; Remediation, cytotoxicity.

- **Potential applications of the produced materials:**

Biomedicine; Environmental remediation; Water treatment; Electronics

- **1996—2004:** *Inorganic bulk phosphates-based materials*

Knowledge and expertise in a) Chemical synthesis (Hydrothermal, Ceramic, Coprecipitation, Sol-gel, polyol); b) Crystal growth; c) Crystal structure; d) Thermal behavior; e) Electrical/dielectric properties, f) Vibrational study

- **Potential applications of the produced materials:**

Detergents; Dental remineralization ; Bone remineralization;...

✓ Instrumental skills

- *Methods of Chemical Preparations:* Ceramic, coprecipitation, hydrothermal, polyol, Sol-gel,...
- *Characterization Techniques:* XRD; TEM; SEM; XRF; TG/DTA; DSC; IR; UV-visible; Raman; Electrical impedance; SQUID magnetometry; EXAFS; EXANES;...

✓ Collaborations

- Dr. Adibah M. Almutari, Faculty of Science, King Saud University (Saudi Arabia).
- Dr. AShon Ahson J. Shaik, COMSATS University, Pakistan.
- Dr. Ahmad Al Zahrami, College of Applied Medical Sciences, Northern Border University (Saudi Arabia)
- Prof. Agnès Smith, University of Limoges, Institut de Recherche sur les Céramiques (France)
- Profs F. Fiévet & S. Ammar, ITODY, University of Paris-Diderot (France).
- Prof. G. Viau, National Institute of Applied Sciences, Toulouse (France).
- Profs M. Le Blanc & V. Maisonneuve, LOF, University Le Mans, Le Mans (France).
- Synchrotron Center (Trieste, Italy).
- Profs A. Bulou & J. M. Grénèche, LPEC, University Le Mans, Le Mans (France).

❖ FUNDED SCIENTIFIC RESEARCH PROJECTS:

Contribute in the following research projects funded by the Deanship of Scientific Research, Northern Border University, Kingdom of Saudi Arabia and by Tunisia-French Lab. collaborations:

No.	Project Title	Award No.	Date	Investigator(s)
1.	Functionalized Spinel-Type Ferrites Nanoparticles for Adsorptive Removal of Chemical Contaminants	SCIA-2023-12-2172	2023	L.B. Tahar et al.
2.	Evaluation of Adsorptive and Catalytic Performance of Nanosized Zerovalent Metals and Alloys for Environmental Remediation Purposes	SCIA-2023-12-6169	2023	M. Roaa, L.B. Tahar et al.
3.	Organic Dye Contaminated Wastewater Treatment Through Iron Oxides-Based Magnetic Nanoparticles.	SCIA-2022-11-1487	2022	L.B. Tahar et al.
4.	CuZnNi Ferrite Nanoparticles As Efficient Adsorbents Of Hazardous Chemicals In Polluted Liquid.	SCIA-2022-11-1528	2022	M. Roaa, L.B. Tahar et al.
5.	Magnetic nanoparticles of nickel and zinc oxides: Chemical preparation, physiochemical study and evaluation of their efficiency for water decontamination from hazardous chemicals.	SCI-2018-3-9- F-7732	2019	L.B. Tahar et al.
6.	Gold nanoparticles: Synthesis, characterization and MB and 4-NP removal.	SCI-2018-3-9- F-7756	2019	M.H. oueslati and L.B. Tahar
7.	Cobalt Ferrites Nanopowders Prepared by the Polyol Method: Efficiency and Reusability as Nanoadsorbents for the Hazardous Cr(VI) ions.	SCI-2018-1-8- F-7259	2018	L.B. Tahar et al.
8.	Green synthesis of silver and gold nanoparticles using polyphenols from Salvia officinalis for anticancer and antioxidant activities.	SCI-2018-1-8- F-7356	2018	M.H. oueslati, L.B. Tahar et al.
9.	Removal of Heavy metals from wastewaters using ferrite nanoparticles.	SCI-2017-1-7-F-6977	2017	L.B. Tahar et al.
10.	Synthesis and characterization of gold nanoparticles using flavonoids from lotus leguminosae for anticancer and antioxidant activities.	SCI-2017-1-7-F-6969	2017	M.H. oueslati, L.B. Tahar et al.
11.	Spinel-type ferrite nanomaterials as potential agents in wastewater treatment.	SCI-2016-1-6-F-5761	2016	L.B. Tahar et al.
12.	Développement de sondes magnétiques pour le traitement du cancer par hyperthermie magnétique: Synthèse, fonctionnalisation et évaluation de la puissance des pertes spécifiques.	07G1214	2007---2010	L.B. Tahar et al.

13.	Synthèse par la méthode polyol, caractérisation et propriétés magnétiques de nanoparticules de ferrite de cobalt dopés aux terres rares.	DGRST-CNRS	2005---2007	L.B. Tahar et al.
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No.	❖ PUBLICATIONS:			
1.	Khan H, Tahar, L.B. , et al. Tailoring Hydrodynamic Size and Stability of TiO ₂ -SiO ₂ Nanoparticles for Enhanced Electrochemical Performance of Supercapacitors, Materials Chemistry and Physics (2025) DOI:10.1016/j.matchemphys.2025.131423			
2.	Rehman HU, Tahar, L.B. , et al. DLS based Optimization of ZnS-CoS Nanoparticles with Enhanced Energy and Power Density for Supercapacitor Applications and Validation by AI Models, Materials Advances (2025) DOI:110.1039/D5MA00846H			
3.	Hussain N., Tahar, L.B. , et al. Optimization of Zn-Cu sulfide nanocomposites: a systematic study for smaller size, enhanced stability, and Reactive Black 5 adsorption efficiency, Colloid and Polymer Science (2025) DOI:10.1007/s00396-025-05479-4			
4.	Saleem A., Tahar, L.B. , et al. Lone Pair versus Aromatic Interactions on Metal Oxide Surfaces: A Combined Spectroscopic and Computational Study, Dalton Transactions (2025) DOI:10.1039/D5DT02125A			
5.	Noubigh A, Tahar, L.B. , et al. Solubility and preferential solvation of nimodipine and azlocillin drug compounds in (ethanol+ ethyl acetate) mixtures, Brazilian Journal of Chemical Engineering (2025) DOI:10.1007/s43153-024-00458-8			
6.	Shanza S. Tahar, L.B. , et al. Optimized size and stability of composite CuO–ZnO metal oxide nanoparticles for efficient removal of Reactive Black 5 dye, Journal of Chemical Technology & Biotechnology (2025) DOI:110.1002/jctb.7867			
7.	Tahar, L.B. , Mogharbel, R., et al. Enhanced removal of the crystal violet dye from aqueous medium using tripolyphosphate–functionalized Zn–substituted magnetite nanoparticles, Results in Chemistry (2025) DOI:10.1016/j.rechem.2025.102152			
8.	Zainab Al-Rashidi, Tahar, L.B. , et al. Effect of Thermal Treatment on the Structure, Microstructure and Magnetic Properties of Co-precipitated CoFe ₂ O ₄ Nanoparticles, Semiconductors (2024) DOI: 10.1134/S1063782624601493			
9.	Mogharbel, R., Tahar, L.B. , Hameed, Y. et al. Microwave-Assisted Synthesis of SDS-Functionalized Maghemite Nanoparticles with Enhanced Efficiency for the Adsorptive Removal of Methylene Blue Dye. Chemistry Africa (2024). DOI:10.1007/s42250-024-01118-7			
10.	Parvizian, M., Tahar, L.B. , et al. Up-converting β-NaY 0.8 [Yb _{0.18} E _{0.02}] F ₄ nanoparticles coated by superparamagnetic γ-Fe ₂ O ₃ nanosatelites: elaboration, characterization and in vitro cytotoxicity, RSC advances (2024) DOI:10.1039/D4RA00909F			
11.	A. Noubigh, M.J. Abualreish & L. B. Tahar Solubility and preferential solvation of nimodipine and azlocillin drug compounds in (ethanol + ethyl acetate) mixtures Braz. J. Chem. Eng. (2024) DOI:10.1007/s43153-024-00458-8			
12.	M.H. Oueslati1, L.B. Tahar , et al. Natural Chalcone Dye-Functionalized Magnetite Nanoparticles: Synthesis, Characterizations and Performance for the Removal of Methylene Blue and the Antibacterial Activity Desalination and Water Treatment (2024) DOI: 10.1016/j.dwt.2024.100256.			

13.	<u>L.B. Tahar</u>, et al. Optimization of Reaction Variables in the Sol-Gel Synthesis of Ni_{0.5}Zn_{0.5}Fe₂O₄ Nanoparticles as a Very Fast Adsorbent of Methylene Blue <i>Desalination and Water Treatment</i> (2024) DOI: 10.1016/j.dwt.2024.100052.
14.	Huili, H., Grindi, B., <u>L.B. Tahar</u>, al. Influence of Fe³⁺ substitution by Al³⁺ on the structural, microstructural, and magnetic properties of Co_{0.2}Ni_{0.3}Zn_{0.5}Fe₂O₄ nanoparticles. <i>Journal of Solid State Chemistry</i> (2024) DOI: 10.1016/j.jssc.2023.124495.
15.	Mogharbel, R., <u>L.B. Tahar</u>, et al. Ultrasmall Cu-Substituted NiZn Ferrite Nanoparticles: Efficiency for the Removal of the Alizarin Red S Dye and Reusability. <i>Arabian Journal for Science and Engineering</i>, (2024) DOI: https://doi.org/10.1007/s13369-023-08107-x
16.	Adel Noubigh, <u>L.B. Tahar</u>, al. Solubility Modeling and Preferential Solvation of Benzamide in Some Pure and Binary Solvent Mixtures at Different Temperatures <i>Journal of Chemical and Engineering Data</i>, , 68 (2023) 1018-1030. DOI: https://doi.org/10.1021/acs.jced.3c00024
17.	M.H. Oueslati1, <u>L.B. Tahar</u>, et al. Biosynthesis of Gold Nanoparticles by Essential Oil of Diplotaxis Acris Characterization and Antimicrobial Activities <i>Oriental Journal of Chemistry</i>. 27 (2021) 405–412. DOI: http://dx.doi.org/10.13005/ojc/370220
18.	Saidani, S., Smith, A., Hafiane, Y. E., <u>L.B. Tahar</u> Role of dopants (B, P and S) on the stabilization of β-Ca₂SiO₄ <i>Journal of the European Ceramic Society</i>. 41 (2020) 880-891. DOI: https://doi.org/10.1016/j.jeurceramsoc.2020.07.037
19.	<u>L.B. Tahar</u>, M. H. Oueslati Fast Adsorption-Desorption of Eriochrome Black T Using Superparamagnetic NiZn Ferrite Nanoparticles. <i>Desalination and Water Treatment</i>. 196 (2020) 315–322. DOI: 10.5004/dwt.2020.26039
20.	Walid Mnasri, <u>L.B. Tahar</u>, et al. Polyol-made luminescent and superparamagnetic β-NaY_{0.8}Eu_{0.2}F₄@γ-Fe₂O₃ core-satellites nanoparticles for dual magnetic resonance and optical imaging. <i>Nanomaterials</i>. 10 (2020) 393-410 DOI: https://doi.org/10.3390/nano10020393
21.	M.H. Oueslati, <u>L.B. Tahar</u>, A.H. Harrath Synthesis of ultra-small gold nanoparticles by polyphenol extracted from Salvia officinalis and efficiency for catalytic reduction of p-nitrophenol and methylene blue.
22.	M.H. Oueslati, <u>L.B. Tahar</u>, A.H. Harrath Catalytic, antioxidant and anticancer activities of gold nanoparticles synthesized by kaempferol glucoside from Lotus Leguminosae. <i>Arabian Journal of Chemistry</i>. 13 (2020) 3112-3122. DOI: 10.1016/j.arabjc.2018.09.003
23.	<u>L.B. Tahar</u>, M.H. Oueslati, S. Saidani, A. Smith A series of novel non-stoichiometric cobalt ferrite nanoparticles as efficient reusable nano-adsorbents for hexachromium ions. <i>Desalination and Water Treatment</i> 163 (2019) 243–259. DOI: 10.5004/dwt.2019.24413
24.	W. Mnasri, <u>L.B. Tahar</u>, S. Nowak, O. Sandre, M. Boissière, S. Ammar Evaluation of polyol-made Gd³⁺-substituted Co_{0.6}Zn_{0.4}Fe₂O₄ nanoparticles as high magnetization MRI negative contrast agents. <i>Journal of Interdisciplinary Nanomedicine</i>. 4 (2019) 4-23. DOI: https://doi.org/10.1002/jin2.53

25.	<u>L.B. Tahar</u>, M.H. Oueslati, B. Grindi A comparative study of two CoZn nanoferrites: Preparation, characterization, magnetic properties, Cr(VI) removal and regeneration. <i>Desalination and Water Treatment</i> 144 (2019) 243–256. DOI: 10.5004/dwt.2019.23682
26.	W. M'Nasri, <u>L.B. Tahar</u>, S. Nowak, D.A. Haidar, M. Boissière, S. Ammar The first one-pot synthesis of undoped and Eu doped β-NaYF₄ nanocrystals and their evaluation as efficient dyes for nanomedicine. <i>Materials Science and Engineering: C</i> 94 (2019) 26–34. DOI: https://doi.org/10.1016/j.msec.2018.09.024
27.	Hichem Huili, Ali Mater, Bilel Grindi, Guillaume Viau, Abdessalem Kouki, <u>L.B. Tahar</u> Influence of the RE₂O₃ (RE = Y, Gd) and CaO nanoadditives on the electromagnetic properties of nanocrystalline Co_{0.2}Ni_{0.3}Zn_{0.5}Fe₂O₄. <i>Arabian Journal of Chemistry</i> 2 (2019) 489–502. DOI: https://doi.org/10.1016/j.arabjc.2017.02.006
28.	<u>L.B. Tahar</u> Effect of Physicochemical Parameters on the Efficiency of the Removal of Hexachromium by Reusable Maghemite Nanoparticles. <i>Journal of the North for Basic and Applied Sciences (JNBAS)</i> 3 (2018) 108–119. DOI: 10.12816/0051340
29.	S. Saidani, A. Smith, Y.E. Hafiane, <u>L.B. Tahar</u> Re-examination of the $\beta \rightarrow \gamma$ transformation of Ca₂SiO₄. <i>Journal of the European Ceramic Society</i> 38 (2018) 4756–4767. DOI: https://doi.org/10.1016/j.jeurceramsoc.2018.06.011
30.	<u>L.B. Tahar</u>, M.H. Oueslati, M.J.A. Abualreish Synthesis of magnetite derivatives nanoparticles and their application for the removal of chromium (VI) from aqueous solutions. <i>J. Colloid and Interface Science</i> 512 (2018) 115–126. DOI: https://doi.org/10.1016/j.jcis.2017.10.044
31.	H. Huili, B. Grindi, G. Viau, <u>L.B. Tahar</u> Influence of the stoichiometry and grain morphology on the magnetic properties of Co substituted Ni–Zn nanoferrites. <i>Ceramics International</i> 42 (2016) 17594–17604. DOI: https://doi.org/10.1016/j.ceramint.2016.08.073
32.	H. Basti, <u>L.B. Tahar</u>, L.S. Smiri, F. Herbst, S. Nowaka, C. Mangeney, S. Ammar Surface modification of γ-Fe₂O₃ nanoparticles by grafting from poly-(hydroxyethylmethacrylate) and poly-(methacrylic acid): Qualitative and quantitative analysis of the polymeric coating. <i>Colloids and Surfaces A: Physicochem. Eng. Aspects</i> 490 (2016) 222–231. DOI: https://doi.org/10.1016/j.colsurfa.2015.11.013
33.	H. Huili, Sophie Nowak, <u>L.B. Tahar</u> Polyol-made stoichiometric Co_{0.2}Ni_{0.3}Zn_{0.5}Fe₂O₄ nanoparticles: Synthetic optimization, structural, and microstructural studies. <i>International Journal of Nanotechnology</i>, 12 (2015) 631–641. DOI: https://doi.org/10.1504/IJNT.2015.068884
34.	H. Huili, B. Grindi, A. kouki, G. Viau, <u>L.B. Tahar</u> Effect of sintering conditions on the structural, electrical, and magnetic properties of nanosized Co_{0.2}Ni_{0.3}Zn_{0.5}Fe₂O₄. <i>Ceramics International</i> 41 (2015) 6212–6225. DOI: https://doi.org/10.1016/j.ceramint.2015.01.024
35.	L. Barhoumi, A. Oukarroum, <u>L.B. Tahar</u> Effects of Superparamagnetic Iron Oxide Nanoparticles on Photosynthesis and Growth of the Aquatic Plant Lemna gibba. <i>Arch Environ Contam Toxicol</i>, 68 (2015) 510–520. DOI: 10.1007/s00244-014-0092-9
36.	H. Basti; A. Hanini, M. Levy, <u>L.B. Tahar</u>, et al. Size tuned polyol-made Zn_{0.9}M_{0.1}Fe₂O₄ (M = Mn, Co, Ni) ferrite nanoparticles as potential heating agents for magnetic hyperthermia: From synthesis control to toxicity survey. <i>Materials Research Express</i>, 1 (2014) 045047. DOI: https://doi.org/10.1088/2053-1591/1/4/045047

37.	H. Huili, B. Grindi, G. Viau, <u>L.B. Tahar</u> Effect of cobalt substitution on the structure, electrical, and magnetic properties of nanocrystalline $\text{Ni}_{0.5}\text{Zn}_{0.5}\text{Fe}_2\text{O}_4$ prepared by the polyol process. <i>Ceramics International</i> 40 (2014) 16235–16244. DOI: https://doi.org/10.1016/j.ceramint.2014.07.059
38.	Y. Baratli, A.-L. Charles, V. Wolff, <u>L. B. Tahar</u> , et al. Age modulates Fe_3O_4 nanoparticles liver toxicity. Dose-dependent decrease in mitochondrial respiratory chain complex activities and coupling in middle-aged as compared to young rats. <i>BioMed Research International</i> , Volume 2014, Article ID 474081, 10 pages. DOI: 10.1155/2014/474081
39.	<u>L.B. Tahar</u> , W M'Nasri, LS Smiri, JP Quisefit, S Ammar Comparative study of the structural and magnetic properties of two cobalt ferrite nanocrystals produced with different iron precursors. <i>Materials Letters</i> 113 (2013) 198–201. DOI: https://doi.org/10.1016/j.matlet.2013.09.055
40.	Y. Baratli, A.-L. Charles, V. Wolff, <u>L.B. Tahar</u> , et al. Impact of iron oxide nanoparticles on brain, heart, lung, liver, and kidneys mitochondrial respiratory chain complexes activities and coupling. <i>Toxicology in Vitro</i> , 27 (2013) 2142–2148. DOI: 10.1016/j.tiv.2013.09.006
41.	<u>L.B. Tahar</u> , H. Basti, F. Herbst, L.S. Smiri, J.P. Quisefit, N.Yaacoub, J.M. Grenèche, S.Ammar $\text{Co}_{1-x}\text{Zn}_x\text{Fe}_2\text{O}_4$ ($0 \leq x \leq 1$) nanocrystalline solid solution prepared by the polyol method: Characterization and magnetic properties. <i>Materials Research Bulletin</i> 47 (2012) 2590–2598. DOI: https://doi.org/10.1016/j.materresbull.2012.04.080
42.	M. Artus, <u>L.B. Tahar</u> , F. Herbst, L. Smiri, F. Villain, N. Yaacoub, J.M. Grenèche, S. Ammar, F. Fiévet Size-dependent magnetic properties of CoFe_2O_4 nanoparticles prepared in polyol. <i>J. Phys.: Condens. Matter</i> 23 (2011) 506001 (9pp). DOI: https://doi.org/10.1088/0953-8984/23/50/506001
43.	H. Basti, <u>L.B. Tahar</u> , L.S. Smiri, F. Herbst, M.J. Vaulay, F. Chau, S.Ammar, S.Benderbous Catechol derivatives-coated Fe_3O_4 and $\gamma\text{-Fe}_2\text{O}_3$ nanoparticles as potential MRI contrast agents. <i>Journal of Colloid and Interface Science</i> 341 (2010) 248–254. DOI: https://doi.org/10.1016/j.jcis.2009.09.043
44.	<u>L.B. Tahar</u> , M. Artus, S. Ammar, L.S. Smiri, F. Herbst, M.J. Vaulay, V. Richard, J.M. Grenèche, F. Villain, F. Fiévet Magnetic properties of $\text{CoFe}_{1.9}\text{RE}_{0.1}\text{O}_4$ nanoparticles ($\text{RE} = \text{La}, \text{Ce}, \text{Nd}, \text{Sm}, \text{Eu}, \text{Gd}, \text{Tb}, \text{Ho}$) prepared in polyol. <i>J. Magn. Magn. Mater.</i> 320 (2008) 3242–3250.
45.	<u>L.B. Tahar</u> , L.S. Smiri, M. Artus, A.L. Joudrier, F. Herbst, M.J. Vaulay, S. Ammar, F. Fiévet Characterization and magnetic properties of Sm- and Gd-substituted CoFe_2O_4 nanoparticles prepared by forced hydrolysis in polyol. <i>Materials Research Bulletin</i> 42 (2007) 1888–1896. DOI: 10.1016/j.jmmm.2008.06.031
46.	<u>L.B. Tahar</u> , et al. Investigation of the Mixed Divalent Cation Monophosphates: Synthesis, Crystal Structure, and Vibrational Study of $\text{CdBa}_2(\text{HPO}_4)_2(\text{H}_2\text{PO}_4)_2$. <i>J. Solid State Chem.</i> 161 (2001) 97–105. DOI: 10.1006/jssc.2001.9289
47.	<u>L.B. Tahar</u> , L. Smiri, Y. Laligant, A. Le Bail Investigation of Mixed Divalent Cation Phosphates: Synthesis and X-Ray Powder Structure of $\text{CdBa}_2(\text{P}_2\text{O}_7)(\text{HPO}_4)$. <i>Solid State Sci.</i> 2 (2000) 285–292.
48.	<u>L.B. Tahar</u> , L. Smiri, Y. Laligant, V. Maisonneuve Investigation of the Alkaline Earth Phosphates: Synthesis and Crystal Structure of a New Strontium Hydrogen Phosphate Form. <i>J. Solid State Chem.</i> 152 (2000) 428–434. DOI: 10.1006/jssc.2000.8700
49.	<u>L.B. Tahar</u> , S. Chabchou, L. Smiri-Dogguy Investigation of Mixed Alkaline Earth Phosphates: Synthesis and Crystal Structure of $\text{CaBa}(\text{HPO}_4)_2$: A New Mixed Alkaline Earth Hydrogenmonophosphate. <i>Solid State Sci.</i> 1 (1999) 15–24. DOI: https://doi.org/10.1016/S1293-2558(00)80061-8

❖ STUDENTS SUPERVISION:

➤ **License (Applied Chemistry) and Engineering Chemistry**

More than of 30 research projects are supervised, selected ones are:

- **R. Galai.**
Microwave Pyrolysis of Household Wastes, valorisation of the oil derived from pyrolysis of high density polyethylene (HDPE) with CaO addition and co-pyrolysis of paper-HDPE. Polytechnic School of Montréal & Faculty of Sciences of Tunis. 2014
- **I. Mabrouk.**
Optimizing of grinding tests of phosphate of roof
Kef Eddour and enrichment by flotation. Phosphate Company of Gafsa & Faculty of Sciences of Tunis. 2014
- **S. Boughanmi.**
Elaboration of Calibration Curves for the Chemical Analyses of Clays and Marls by XRF. SCB & SCB & Faculty of Sciences of Tunis. 2013
- **L. Islem.**
Study of Manufacture of HRS Cements from
Raw Materials of Cement Company of Bizerte. SCB & Faculty of Sciences of Tunis. 2013
- Granulometric, Mineralogical, and Chemical Analyses of Various Sands of the Region of Kasserine. Office of Mining & Faculty of Sciences of Tunis.
- **B. Fatma, G. Haykel, B. M. Manef.**
SCB & Effect of the Mineralogy of Clinker on the Initial Mechanical Resistance of Bizerte Cements. University of Carthage. 2012
- **T. Islem, M. Nefzi.**
Water Analyses: Optimization of the Injection of Chemicals Into the Water Treatment Station, STIR & Faculty of Sciences of Bizerte. 2012
- **Ghaïth, B. M. Imed.**
Recycling of Acid Etching Solution by Chloride Copper. Fuba & Faculty of Sciences of Bizerte. 2008.

➤ **M.Sc. Chemistry**

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